Technical Assistance Request

We are currently iterating prototypes of our commercial building solar, wind and storage technology, and searching for pilot project sponsors for when this is complete. Below are the needs we expect to have over the next 6 months that the American-Made network is likely to be helpful with.

Pilot Project Connections

We are actively searching for our first pilot installation and have a few potential options with universities and green building non-profits who are willing to take the first plunge. However, we've designed our solution specifically around long, commercial and industrial buildings, and key types of long term end users will likely be retail buildings, factories, and warehouses. We welcome any introductions to companies which may be passionate and interested in helping us to pilot our first system. I'd like to reach out to investors and connectors within the American-Made network who may have key strategic connections which could form our first pilot.

Customer Connections

While we have extensively validated the cost targets of our system without storage, we know there are potential additional benefits of the storage-integrated piece of our system which could be capitalized on. Connections which can help us to get a better understanding of the nascent commercial building energy storage market would be very useful in helping us decide whether or not to tailor our technology around specific storage-related benefits.

National Lab Validation

We've been lucky to have a great team to work with to validate our technology at Argonne National Laboratory. As a part of a 2 year incubation program at ANL, we've been able to work with experts in Computational Fluid Dynamics, Aerodynamics, Wind Prediction, and Drive Train Reliability to advance and validate our technology. We see significant benefit in supplementing this expertise with some of the specific distributed solar and wind expertise at NREL. We'd be interested to work with NREL to validate our models and assumptions and prepare our system for eventual certification testing.

Structural Engineering and Architecture

Our rooftop system may be secured to a building through counterweights or bolted into the building structure. We've worked with solar installers and structural engineers to integrate our present rooftop apparatus onto our building but we need a wider understanding of commercial building structures and how we'll tie into them. Penetrating into a rooftop may impose significant costs. Roof decking may not support sufficient load. Our present system is able to be sited directly over a structural beam but another location would require additional framework to span across beams. Additional knowledge in this area would help inform our design into one agnostic of building construction type.

Additionally, we are currently performing a thorough study with architects and potential customers to get feedback on different aesthetic choices as we iterate the technology. We'd welcome connections to any architects familiar with the commercial building and renewables space.

Manufacturing

We are currently specialized in innovative systems-level design and prototyping, but will be transitioning to the manufacturing phase, and our long term manufacturing location and

strategy. Improving design for manufacturing will reduce long term cost. Plastic and metal injection molding knowledge is applicable to blade and gearbox design. Metrology and reliability engineering can ensure our machines operate the desired lifespan and meet maintenance schedules unlike many current wind turbines.

Network partners and makerspaces will likely be very useful to us in understanding incentives, and pros/cons of different manufacturing locations and processes.